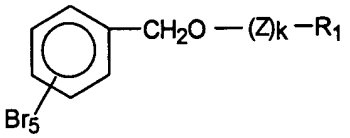
We claim:

1. A pentabromobenzyl alkyl ether of the formula:



wherein:

- Z represents the group $-(Y-O)_n-$, wherein Y is a linear or branched $-(C_2-C_8)$alkylene-, preferably $-CH_2CH_2-$ and $-CH_2CH(CH_3)-$;
- n represents an integer from 2 to 4;
- k may be 0 or 1;
- R_1 represents hydrogen, a linear or branched $-(C_1-C_{10})$alkyl, a linear or branched $-(C_2-C_{10})$alkylene-OH, allyl, or 1,2-dibromopropyl;

provided that when k is zero R_1 represents a linear or branched $-(C_4-C_{10})$alkyl or a linear or branched $-(C_2-C_{10})$alkylene-OH and when k is 1, R_1 represents hydrogen, a linear or branched $-(C_1-C_4)$alkyl, allyl or 1,2-dibromopropyl.

2. A pentabromobenzyl alkyl ether according to claim 1, wherein Z represents a group selected from $-(C_2H_4O)_n$ and $-(C_3H_6O)_n$, wherein n represents 2.

3. A pentabromobenzyl alkyl ether according to claim 1, wherein k=1 and R_1 represents H, methyl or butyl.

4. A pentabromobenzyl alkyl ether according to claim 1, wherein k=0 and R_1 represents branched (C_8)alkyl or linear (C_6)alkylene-OH.

5. A pentabromobenzyl alkyl ether according to claim 1, selected from the group consisting of:

(i) pentabromobenzyl-O-CH_2-CH_2OCH_3;

(ii) pentabromobenzyl-O-$CH_2CH_2O(CH_2)_3CH_3$;

(iii) pentabromobenzyl-O-$(CH_2CH_2O)_2CH_3$;

(iv) pentabromobenzyl-O-$(CH_2CH_2O)_2H$;

(v) pentabromobenzyl-O-$(CH_2)_6OH$;

(vi) pentabromobenzyl-O-$CH_2CH(C_2H_5)(CH_2)_3CH_3$;

(vii) pentabromobenzyl-O-$CH_2CH_2OCH_2CH=CH_2$;

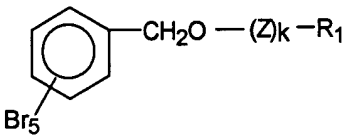
(viii) pentabromobenzyl-O-$(C_3H_6O)_2$-CH_3

(ix) pentabromobenzyl-O-$(C_3H_6O)_2$-H

6. A compound according to any one of claims 1 to 5, for use as a fire retardant.

7. A compound according to any one of claims 1 to 5, for use as a fire retardant in a polymeric composition or in polymer-containing composition.

8. A fire retarded polymeric or polymer-containing composition comprising a pentabromobenzyl alkyl ether of the formula:



wherein Z, R_1 and k are as defined in claim 1.

9. A fire retarded composition according to claim 8, wherein said polymer is selected from the group consisting of chlorinated polyethylene, polyethylene, polypropylene, styrene resins, high-impact polystyrene, polyvinyl chloride, acrylonitrile-butadiene-styrene copolymer,

flexible and rigid polyurethane, epoxy resins and unsaturated polyester resins.

10. A fire retarded composition according to claim 9, wherein said polymer is polypropylene.

11. A fire retarded composition according to claim 9, wherein said polymer is high impact polystyrene (HIPS).

12. A fire retarded composition according to claim 9, wherein said polymer is acryl-butadiene-styrene terpolymer (ABS).

13. A fire retarded composition according to claim 9, wherein said polymer is polyurethane.

14. A fire retarded composition according to claim 8, wherein said polymer is selected from the group consisting of polyurethane, polypropylene copolymer, high impact polystyrene (HIPS) and acryl-butadiene-styrene terpolymer (ABS), and said pentabromobenzyl alkyl ether is selected from the group consisting of:

(i) pentabromobenzyl-O-CH_2-CH_2OCH_3;

(ii) pentabromobenzyl-O-$CH_2CH_2O(CH_2)_3CH_3$;

(iii) pentabromobenzyl-O-$(CH_2CH_2O)_2CH_3$;

(iv) pentabromobenzyl-O-$(CH_2CH_2O)_2H$;

(v) pentabromobenzyl-O-$(CH_2)_6OH$;

(vi) pentabromobenzyl-O-$CH_2CH(C_2H_5)(CH_2)_3CH_3$;

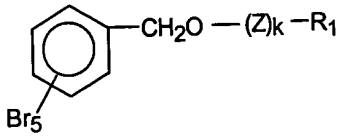
(vii) pentabromobenzyl-O-$CH_2CH_2OCH_2CH=CH_2$;

(viii) pentabromobenzyl-O-$(C_3H_6O)_2$-OCH_3

(ix) pentabromobenzyl-O-$(C_3H_6O)_2$-H

15. A fire retarded composition according to any one of claims 8 to 14, further comprising a metal oxide, preferably Sb_2O_3.

16. A process for the preparation of a pentabromobenzyl alkyl ether of the formula:



wherein Z, R_1 and k are as defined in claim 1 , comprising reacting a glycol, a mono-, or di -alcohol of the formula $HO-(Z)_k-R_1$, wherein Z, R_1 and k ar e as defined in claim 1, or the corresponding metal alcoholate thereof , with a pentabromobenzyl halide, preferably pentabromobenzyl bromide, optionally in the presence of a base.

17. A pentabromobenzyl alkyl ether according to claim 1 , for use as a fire retardant, substantially as described and exemplified in the specification.

18. A process for the preparation of pentabromobenzyl alkyl ethers as defined in claim 1, substantially as described and exemplified in the specification.

19. A fire retarded poly mer composition comprising pentabromobenzyl alkyl ether according to claim 1, substantially as described and exemplified in the specification.